

*Or*

Describe the tissue structure of dicotyledonous and monocotyledonous roots.

7. How are the minerals absorbed by the plants ? Explain in detail.

*Or*

Briefly describe water potential. What are the factors affecting it ?

Printed Pages : 4

EBT-102

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 9586

Roll No.

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**B. Tech.**

**(Semester-I) Theory Examination, 2011-12**

**REMEDIAL BIOLOGY-I**

*Time : 3 Hours]*

*[Total Marks : 100*

*Note : Attempt questions from each Section as indicated.*

**Section-A**

1. Attempt *all* parts of the following : 2×10=20
- (a) Define the terms Phylum and Class.
  - (b) What are porins ?
  - (c) List the main differences between mitosis and meiosis.
  - (d) What are the main characteristics of prokaryotic cells ?
  - (e) What are the important properties of an enzyme ?
  - (f) What is the nature of cell-walls in diatoms ?

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- (g) What is the difference between monocot and dicot root ?
- (h) What is meant by tertiary structure of proteins ?
- (i) What is the significance of meiosis ?
- (j) All elements that are present in a plant need not be essential to its survival. Comment.

### Section-B

2. Attempt any *three* parts of the following :  $10 \times 3 = 30$

- (a) Describe the characteristics and classification of living organisms.
- (b) What are the characteristic features of Euglenoids ?
- (c) Give a brief account of viruses with respect to their structure and nature of genetic material.
- (d) What are the classifications of algae ? Discuss their main characteristics.
- (e) Briefly describe the different parts of a flowering plant and types of roots.

### Section-C

Attempt *all* questions :

$10 \times 5 = 50$

- 3. Write a note on economic importance of algae and gymnosperms.

*Or*

Differentiate between the following :

- (a) Liverworts and Moss
- (b) Homosporous and heterosporous Pteridophyte.

- 4. Write a note on zoological parks.

*Or*

Write a note on museum.

- 5. What is meant by modification of root ? What type of modification of root is found in the (a) Banyan tree (b) Turnip (c) Mangrove trees ?

*Or*

Explain pressure flow hypothesis of translocation of sugars in plants.

- 6. What is a flower ? Describe the parts of a typical angiosperm flower.